

To: Sheldrake, Sean[sheldrake.sean@epa.gov]; Conley, Alanna[conley.alanna@epa.gov]
From: Cora, Lori
Sent: Thur 2/28/2013 6:00:46 PM
Subject: RE: Portland Harbor questions

See my suggested edits to #3 in bold below

From: Sheldrake, Sean
Sent: Wednesday, February 27, 2013 6:48 PM
To: Conley, Alanna
Cc: Cora, Lori
Subject: RE: Portland Harbor questions

Alanna, I added to your answers below—see what you think. What you have drafted looks great.

I'm cc'ing Lori in case she would like to modify #3 at all.

Thanks!

S

Sean Sheldrake, RPM, Unit Diving Officer
USEPA, Region 10
Environmental Cleanup Office
1200 Sixth Avenue, Suite 900, ECL-110
Seattle WA 98101-3140
sheldrake.sean@epa.gov
Phone: **206.553.1220**
Region 10 Dive Unit: <http://www.epa.gov/region10/dive>

Like us on Facebook! <http://www.facebook.com/EPADivers>

Portland Harbor Cleanup: <http://www.epa.gov/region10/portlandharbor>

From: Conley, Alanna
Sent: Wednesday, February 27, 2013 5:16 PM
To: Sheldrake, Sean
Subject: RE: Portland Harbor questions

Hi Sean,

Personal Privacy / Ex. 6 and doing presentation for chemistry on PDXH.

In effort to save your time, I took a stab at answering several of the questions. Hope it will won't take more time to correct☺ Please take a very GOOD look at answers to #1 and #3. I left #2 totally in your capable hands.

Think it's possible to have response by Friday? If not no worries will shoot for next week.

From: **Personal Privacy / Ex. 6**
Sent: Tuesday, February 26, 2013 5:09 PM
To: Conley, Alanna
Subject: Portland Harbor questions

Hello Alanna,

My name is **Personal Privacy / Ex. 6** and I called earlier today in regards to some questions I had for a presentation I'm doing for my chemistry class on the Portland Harbor superfund site. These are predominantly concerned with the chemistry involved in the removal of some of these contaminants which are present in the region, and also a general question about fund allocation from Congress.

1.) What specific methods are being considered in the remedial actions for the region, specifically with regard to DDT and the isomers of DDT which are present around Arkema?

When reading through the Early Action plan for that particular site, I was unable to discern what methods are being considered specifically, and I was curious as to whether ideas such as the utilization of supercritical CO₂ were being considered for the project.

The methods being considered for Arkema are discussed in the broader Draft Feasibility Study (FS) for Portland Harbor. Additionally, the proposed cleanup plan for Arkema will also be incorporated into the broader Proposed Plan for the Portland Harbor. The alternatives discussed in the Draft FS include enhanced monitored natural recovery, dredging, capping, in-situ treatment and a combination of those alternatives. The alternatives presented in the Draft FS were applied site wide rather than applying specific approaches to remove contaminants of concern (such as DDT). EPA is currently working with the Potentially Responsible Parties (PRPs) to perform analysis that would define hotspots, such as DDT, and consider alternatives/ strategies to treat those specific contaminants. The Proposed Plan, would outline a more specific path forward for treating DDT at the Arkema site. We anticipate having the Proposed Plan in 2014 for public review and comment. Supercritical CO₂ was not considered as a cleanup technology in situ or ex situ given the extent of the cost of such treatment.

2.) In general, what are the most effective methods for breaking down DDT apart from allowing it to naturally decay over time? Our cleanup alternatives did not focus on breakdown of DDT except through natural processes. There are a number of letters written regarding breakdown of DDT on our website, such as this one regarding confined disposal of DDT contaminated sediment: [EPA June 19 CDF Evaluation Letter and Arkema July 25, 2008 Response \(PDF\) \(40 pp, 3.75MB to start\)](#) - July 25, 2008

3.) Given that Smurfit-Stone Container Corporation has filed for bankruptcy, how will the clean up of the Arkema site be funded, and in what realistic time frame could the project be completed? **The Portland Harbor Superfund Site cleanup will encompass approximately 10 river miles (RM 2 to RM 12) of the lower Willamette River. The hazardous substances that have been released into the river have come from multiple sources. The Arkema site is one of the most significant sources to releases to the river and thus, the area adjacent to the Arkema former chemical manufacturing plant is one of the highest concentration areas within the Portland Harbor Superfund Site. EPA has identified approximately 150 parties as potentially responsible for reimbursement of cleanup costs. EPA will request those parties to negotiate an agreement to fund and implement the cleanup once a cleanup plan**

has been selected. A few of the parties identified by EPA have filed for bankruptcy over the past decade. EPA can get money from companies in bankruptcy if sufficient funds are available after other secured creditors are paid, which is the case with Smurfit-Stone Container Corporation. That money will be used to fund response actions at the site. In other bankruptcies, the obligation to contribute to the cleanup is allowed to “pass through” the bankruptcy so the company remains liable for its cleanup obligations, such as is the case with the Olympic Pipeline Company. In other bankruptcies there is no money available for cleanup and those companies are no longer available to contribute to the cleanup. However, there remain many, viable parties to fund and implement the cleanup. If an agreement cannot be reached with the parties, EPA has other enforcement options. EPA can order parties to perform the cleanup through a unilateral administrative order, or EPA could perform the cleanup and sue the parties for cost reimbursement later.

Timeframe for project completion will be better determined after EPA issues the Record of Decision (justification for the treatment options selected for Portland Harbor). The ROD comes after the Proposed Plan. We do not anticipate having the ROD before 2015.

I attempted to generalize these questions as much as possible, and understand if there are some aspects of them that you are not at liberty to discuss, but any helpful information would be very much appreciated.

Thank you for your time and consideration,

Personal Privacy / Ex. 6